2013 Louisiana Environmental Education Symposium

PRESENTER LINE-UP DESCRIPTIONS

**Line-up is subject to change.*

The following concurrent sessions are being offered on **Saturday, February 23, 2013** for the 2013 conference.

8:00AM–9:00AM

Get Smart!

Come and participate in several exciting hands-on activities that will pique your students' interest in sustainability and make them eager to learn more. Be prepared to have fun and receive handouts that are "ready-to-use" in your classroom! Door prizes will be awarded!

Rebecca Holloway and Allison Story, East Baton Rouge Parish School System

Hands-On ***K-4; 5-8***

Rabbit-Tracking: Looking for Evidence of Wildlife and Interpreting Food Webs

Track "Swamper," the swamp rabbit, as he looks for evidence of other animals in his bottomland hardwood forest ecosystem (aka swamp). Interpret a food web, follow the energy flow, and learn how to make casts of animal tracks! Folder with lesson plans and links provided.

Amy Ouchley

Hands-On ***5-8***

Sediments, Subsidence, and Sea-level Rise: the Elephant in the Wetlands

Use simple physical and mathematical models that represent the coastline. Join an interactive discussion of subsidence rates, sea-level rise, and Mississippi River sedimentation rates which underlie all efforts to restore the Louisiana coastline. Handouts and links to graphics provided.

Dr. Ivan Gill, University of New Orleans

Harry Roberts, Louisiana State University

Hands-On ***5-8; 9-12***

The Science of Service Learning: One School's Journey to Promote Science Knowledge through Service

Learn how Isidore Newman School implemented science-based service-learning programs that increase student knowledge and understanding of coastal issues. Hear how elementary/middle teachers work with community partners to enrich student learning! Handouts with links and activities provided.

Jennifer Williams, Lisa Coulon, and Elaine Sevin, Isidore Newman School

Hands-On ***General***

WETSHOP – A Coastal Awareness Institute

Want a sneak peek of WETSHOP? This week-long workshop provides 55 hours of CLUs and numerous wetlands classroom resources. Unearth the extensive bounty of our coast and learn about wetland loss, the importance of Louisiana's shores, and restoration efforts.

MattiLynn Dantin, LA Department of Wildlife & Fisheries

Exemplary ***General***

The Environmental Health Student Portal: Resources for Education and Careers

The Environmental Health Student Portal (EHSP) promotes environmental health education and career guidance to middle/high school students. Discover experiments, readings, homework, and activities useful for all grades K-12. Learn about ToxTown, ToxMystery, and other resources. Handouts and related materials provided.

David Duggar, LSU Health Shreveport, Health Sciences Library

Lesson ***5-8; 9-12; General***

9:10AM–10:10AM

Energy Bike Workshop

The Alliance for Affordable Energy's new workshop curriculum focuses on concepts of clean vs. dirty energy, renewable vs. non-renewable energy sources, and energy conservation. Come learn about our fun, interactive curriculum and see the bicycle generator in action! Three curriculum packets provided.

Julia Michaels, Alliance for Affordable Energy

Lesson K-4

Role-playing to Learn How Shrimp Travel from the Gulf of Mexico to the Boiling Pot

Lights, Camera, Action! Learn how to conduct a role-playing game with your students to teach sustainability concepts through the shrimp life cycle and Louisiana shrimping livelihood. Incorporate reading, math, and science skills to learn system interdependence! Digital or hard copies of materials provided.

Lauren Land, Louisiana Sea Grant College Program

Lesson 5-8

Sustainability Education in a World of 7 Billion

Discover innovative, hands-on activities that examine the connections between human population growth, resource consumption, and sustainable ecosystems and communities. Engage in memorable games and simulations. Receive a CD-ROM of lesson plans!

Sue Ellen Lyons, Holy Cross School

Hands-On 5-8; 9-12

Classrooms in Motion - The Art of Making Movies for the Classroom

Highlight STEM through movies! Learn to make movies from all those raw video clips you have taken. Movies are a great way to showcase student stewardship activities, communicate with other teachers or students, demonstrate classroom activities, and much more! Participants will actually make a movie! Guide for teachers provided.

Murt Conover, Louisiana Universities Marine Consortium (LUMCON)

Hands-On General

Modeling the Multiple Lines of Defense for Hurricane Protection

Capture your students' interest through these simple, hands-on activities created by the Lake Pontchartrain Basin Foundation. You will explore different methods for students to demonstrate the multiple lines of defense strategy for hurricane protection. Interactive CD and brochures provided.

JoAnn Burke, Lake Pontchartrain Basin Foundation

Hands-On General

Pollinator Partnership Educational Tools and Activities for Teachers and Educators

Find out how you and your students can help improve the current pollinator status in the U.S.! You will walk through the education portion of our website, including a demonstration of our Bee Smart School Garden Kit. Your students can be a part of the solution! Handouts, materials, and links provided.

Jennifer Blanchard, Pollinator Partnership/Honey Island Conservation Program

Hands-On; Lesson General

10:35AM –11:35AM

Break the Plastic Habit

Learn how to create an awareness campaign to teach the students how to use less plastic in their daily lives! Get the dirty facts on litter from Louisiana to the Great Pacific Garbage Patch. Participants will also take home great ideas for art projects using "garbage"! PowerPoint and Keep Louisiana Beautiful Curriculum Guide with video link provided.

Alma Robichaux, Barataria-Terrebonne National Estuary Program (BTNEP)

Lesson 5-8; 9-12

My Footprint on the Globe: Making Connections!

Ever wonder how your day to day actions affect the planet? Engage in multi-disciplinary lessons on sustainably: making smart food choices and reducing consumption. A Rocket Stove demo will show how small lifestyle changes can decrease environmental impact! CD with all activities from session provided.

Rose Butler, Audubon Nature Institute

Lesson 5-8

Using GPS and GIS Technologies to Teach the Local Environment

Add some excitement to your classroom! Use mobile GPS-enabled devices to teach map skills and collect and organize environmental data! Receive up-to-date user-friendly resources for incorporating GPS and GIS into classroom and field-based science projects. Map resources, how-to pages, copies of activities provided.

Dinah Maygarden and Heather Egger, University of New Orleans

Lesson 5-8; 9-12

What does Education for Sustainability Mean for Your Classroom?

Participate in a "Quality of Life" classroom activity in which teachers learn how to engage students in identifying the environmental, economic, and social dimensions of features necessary for healthy communities. Learn about the Education for Sustainability project. Education for Sustainability Guide and Standards, links, and more provided.

Lauren Land, Louisiana Sea Grant College Program

Hands-On General

Particulate Air Pollution and its Effect on Human Health

Air pollution can have serious effects on human health when fine particles produced by incineration/combustion processes are transported and taken into the body. Construct an easy to make model that graphically depicts this process—your students will be amazed! Summary fact sheet provided.

Maud Walsh, Eli Mitran, and Cheri McFerrin , LSU / LSU Superfund Research Program

Hands-On General

Grant Writing Tips

Do you want to write grants that can be funded to get additional materials and equipment for your classroom or a special event? Learn how to write quality grant proposals/applications. Tips and examples will be given on determining and providing the correct information. Handouts and links to grant opportunities provided.

Ann Wilson, LA Department of Education

Exemplary General

11:45AM –12:45PM

Let's Talk Trash! - Start a Debris Removal Project to Build a More Sustainable School & Community

Help your students become Environmental Warriors to stop debris entanglement and strangulation, and ingestion of plastics that maim and kill animals. Hands-on, higher-level thinking activities engage students in a Marine or Land Debris Removal campaign! Lesson plans and links to full curriculum provided. Receive information on the 2013 workshop.

Sandra Saye Foucqueteau, Upper Point Coupee Elementary

Lesson K-4; 5-8

Got Bot?

We do, and you can too! Immerse yourself in the world of ROVs! Explore the Aquatic Robotics program from the Maritime Museum. Connect STEM with today's workplace, and take home ideas to use with your own students. Learn about a special summer seminar!

Jeanne Brooks, Lake Pontchartrain Basin Maritime Museum

Exemplary 5-8

Teaching and Assessing 21st Century skills in the Environmental Science Classroom

Develop student college and career readiness skills using critical thinking, communication, collaboration, and creativity! These student-driven projects explore water quality, island biogeography, invasive species, coastal restoration, mining, and land use. Links to student products and lessons provided.

Janell Simpson, Patrick F. Taylor Science & Technology Academy

Lesson 9-12

Island Time: Learning about Louisiana's Barrier Islands

Everything you ever wanted to know about barrier islands: island anatomy, the delta lobe cycle, forces affecting barrier islands, and much more. Participate in a hands-on mapping activity to demonstrate the migration of barrier islands! Content material and lesson ideas provided.

Murt Conover, Louisiana Universities Marine Consortium (LUMCON)

Dinah Maygarden, University of New Orleans

Alma Robichaux, Barataria-Terrebonne National Estuary Program (BTNEP)

Hands-On General

New Methods of Student Inquiry into Climate Change

Use a newly-developed, easy-to-use online tool called GeoMapApp to explore: What was Earth's climate like in the past? How will climate change affect Louisiana? What resources are there for student inquiry, research, and geospacial imagery investigations into climate? Student learning guides provided.

Steven Babcock, LSU Laboratory School

Lesson 9-12; General

The Bear Facts on the Louisiana Black Bear

Follow that bear! This presentation will map the journey of our endangered Louisiana black bears' road to recovery. Hands-on activities that illuminate general species information, current population numbers, and other little known information will be included.

Carrie Salyers, LA Department of Wildlife & Fisheries

Exemplary; Lesson General

The following 2012 Environmental Education Research Grant recipients will be showcasing their research projects in the Exhibit Hall on **Friday, February 22nd**.

2012 Grant Recipient Showcase

Warwick Allen — "Latitudinal gradients in tritrophic interactions between arthropod herbivores of *Phragmites australis* and their natural enemies"
Our research examines how the strength of tritrophic (plant-herbivore-natural enemy) interactions varies with latitude and plant genotype, and the possible influence of these trends on the invasion success of *Phragmites australis* and other widespread invasive species. Research is conducted using observational and experimental studies in both the laboratory and field.

Ganesh Bhattarai — "Apparent competition between native and exotic genotypes of *Phragmites australis* and implication for invasion success"
I am conducting a field experiment to examine if the exotic genotype of *Phragmites* causes increased herbivory in native genotypes and if that varies with latitude. The consequence of increased herbivory on native plants is examined in a complimentary common garden experiment. My study will help understanding the invasion of coastal wetlands by the Eurasian genotype of this species.

Anthony Chow — "Differences in physiological traits between different haplotypes of *Phragmites australis*"
Phragmites australis, a common wetland species, is both a native and invasive species in North America. In addition to native haplotypes of *Phragmites*, there are also two introduced, non-native haplotypes. The results from my research demonstrate significant differences in the physiological traits between native and introduced haplotypes of *Phragmites australis*.

Brittany Miller — "Isolation and Characterization of Phages of *Agrobacterium tumefaciens*"
Bio-control can protect a plant against pests, as an alternative to pesticides, eliminating the contamination of the ecosystem by harmful chemicals. Our lab is interested in the use of phage therapy as a means to control crown gall disease caused by *Agrobacterium tumefaciens*, obviating the need for pesticides.

Jared Wolfe — "The Bluebonnet Bird Monitoring Project: Studying Birds in Baton Rouge's Urban Forest Fragments"
The Bluebonnet Bird Monitoring Project (BBMP) is a volunteer-based program that has been monitoring bird populations in Baton Rouge since 2010 using bird banding and audio-visual census techniques. Additionally, BBMP partners with BREC to provide unparalleled hands-on environmental outreach opportunities to hundreds of local children each year. BBMP also works with LSU to train the next generation of professional ornithologists in Louisiana.